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MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY

I.—THE UNREALITY OF TIME.

BY J. ELLIS MCTAGGART.

IT doubtless seems highly paradoxical to assert that Time is unreal, and that all statements which involve its reality are erroneous. Such an assertion involves a far greater departure from the natural position of mankind than is involved in the assertion of the unreality of Space or of the unreality of Matter. So decisive a breach with that natural position is not to be lightly accepted. And yet in all ages the belief in the unreality of time has proved singularly attractive.

In the philosophy and religion of the East we find that this doctrine is of cardinal importance. And in the West, where philosophy and religion are less closely connected, we find that the same doctrine continually recurs, both among philosophers and among theologians. Theology never holds itself apart from mysticism for any long period, and almost all mysticism denies the reality of time. In philosophy, again, time is treated as unreal by Spinoza, by Kant, by Hegel, and by Schopenhauer. In the philosophy of the present day the two most important movements (excluding those which are as yet merely critical) are those which look to Hegel and to Mr. Bradley. And both of these schools deny the reality of time. Such a concurrence of opinion cannot be denied to be highly significant—and is not the less significant because the doctrine takes such different forms, and is supported by such different arguments.

I believe that time is unreal. But I do so for reasons which are not, I think, employed by any of the philosophers whom I have mentioned, and I propose to explain my reasons in this paper.

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Positions in time, as time appears to us *primâ facie*, are distinguished in two ways. Each position is Earlier than some, and Later than some, of the other positions. And each position is either Past, Present, or Future. The distinctions of the former class are permanent, while those of the latter are not. If M is ever earlier than N, it is always earlier. But an event, which is now present, was future and will be past.

Since distinctions of the first class are permanent, they might be held to be more objective, and to be more essential to the nature of time. I believe, however, that this would be a mistake, and that the distinction of past, present and future is as *essential* to time as the distinction of earlier and later, while in a certain sense, as we shall see, it may be regarded as more *fundamental* than the distinction of earlier and later. And it is because the distinctions of past, present and future seem to me to be essential for time, that I regard time as unreal.

For the sake of brevity I shall speak of the series of positions running from the far past through the near past to the present, and then from the present to the near future and the far future, as the A series. The series of positions which runs from earlier to later I shall call the B series. The contents of a position in time are called events. The contents of a single position are admitted to be properly called a plurality of events. (I believe, however, that they can *as* truly, though not *more* truly, be called a single event. This view is not universally accepted, and it is not necessary for my argument.) A position in time is called a moment.

The first question which we must consider is whether it is essential to the reality of time that its events should form an A series as well as a B series. And it is clear, to begin with, that we never *observe* time except as forming both these series. We perceive events in time as being present, and those are the only events which we perceive directly. And all other events in time which, by memory or inference, we believe to be real, are regarded as past or future—those earlier than the present being past, and those later than the present being future. Thus the events of time, as observed by us, form an A series as well as a B series.

It is possible, however, that this is merely subjective. It may be the case that the distinction introduced among positions in time by the A series—the distinction of past, present and future—is simply a constant illusion of our minds, and that the real nature of time only contains the distinction of the B series—the distinction of earlier and

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later. In that case we could not *perceive* time as it really is, but we might be able to *think* of it as it really is.

This is not a very common view, but it has found able supporters. I believe it to be untenable, because, as I said above, it seems to me that the A series is essential to the nature of time, and that any difficulty in the way of regarding the A series as real is equally a difficulty in the way of regarding time as real.

It would, I suppose, be universally admitted that time involves change. A particular thing, indeed, may exist unchanged through any amount of time. But when we ask what we mean by saying that there were different moments of time, or a certain duration of time, through which the thing was the same, we find that we mean that it remained the same while other things were changing. A universe in which nothing whatever changed (including the thoughts of the conscious beings in it) would be a timeless universe.

If, then, a B series without an A series can constitute time, change must be possible without an A series. Let us suppose that the distinction of past, present and future does not apply to reality. Can change apply to reality? What is it that changes?

Could we say that, in a time which formed a B series but not an A series, the change consisted in the fact that an event ceased to be an event, while another event began to be an event? If this were the case, we should certainly have got a change.

But this is impossible. An event can never cease to be an event. It can never get out of any time series in which it once is. If N is ever earlier than O and later than M, it will always be, and has always been, earlier than O and later than M, since the relations of earlier and later are permanent. And as, by our present hypothesis, time is constituted by a B series alone, N will always have a position in a time series, and has always had one.[1] That is, it will always be, and has always been, an event, and cannot begin or cease to be an event.

Or shall we say that one event M merges itself into another event N, while preserving a certain identity by means of an unchanged element, so that we can say, not merely that M has ceased and N begun, but that it is M which has

[1] It is equally true, though it does not concern us on the hypothesis which we are now considering, that whatever is once in an A series is always in one. If one of the determinations past, present, and future can ever be applied to N, then one of them always has been and always will be applicable, though of course not always the same one.

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become N? Still the same difficulty recurs. M and N may have a common element, but they are not the same event, or there would be no change. If therefore M changes into N at a certain moment, then, at that moment, M has ceased to be M, and N has begun to be N. But we have seen that no event can cease to be, or begin to be, itself, since it never ceases to have a place as itself in the B series. Thus one event cannot change into another.

Neither can the change be looked for in the numerically different moments of absolute time, supposing such moments to exist. For the same arguments will apply here. Each such moment would have its own place in the B series, since each would be earlier or later than each of the others. And as the B series indicate permanent relations, no moment could ever cease to be, nor could it become another moment.

Since, therefore, what occurs in time never begins or ceases to be, or to be itself, and since, again, if there is to be change it must be change of what occurs in time (for the timeless never changes), I submit that only one alternative remains. Changes must happen to the events of such a nature that the occurrence of these changes does not hinder the events from being events, and the same events, both before and after the change.

Now what characteristics of an event are there which can change and yet leave the event the same event? (I use the word characteristic as a general term to include both the qualities which the event possesses, and the relations of which it is a term—or rather the fact that the event is a term of these relations.) It seems to me that there is only one class of such characteristics—namely, the determination of the event in question by the terms of the A series.

Take any event—the death of Queen Anne, for example—and consider what change can take place in its characteristics. That it is a death, that it is the death of Anne Stuart, that it has such causes, that it has such effects—every characteristic of this sort never changes. "Before the stars saw one another plain" the event in question was a death of an English Queen. At the last moment of time—if time has a last moment—the event in question will still be a death of an English Queen. And in every respect but one it is equally devoid of change. But in one respect it does change. It began by being a future event. It became every moment an event in the nearer future. At last it was present. Then it became past, and will always remain so, though every moment it becomes further and further past.

Thus we seem forced to the conclusion that all change is

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only a change of the characteristics imparted to events by their presence in the A series, whether those characteristics are qualities or relations.

If these characteristics are qualities, then the events, we must admit, would not be always the same, since an event whose qualities alter is, of course, not completely the same. And, even if the characteristics are relations, the events would not be completely the same, if—as I believe to be the case—the relation of X to Y involves the existence in X of a quality of relationship to Y.[1] Then there would be two alternatives before us. We might admit that events did really change their nature, in respect of these characteristics, though not in respect of any others. I see no difficulty in admitting this. It would place the determinations of the A series in a very unique position among the characteristics of the event, but on any theory they would be very unique characteristics. It is usual, for example, to say that a past event never changes, but I do not see why we should not say, instead of this, "a past event changes only in one respect—that every moment it is further from the present than it was before". But although I see no intrinsic difficulty in this view, it is not the alternative I regard as ultimately true. For if, as I believe, time is unreal, the admission that an event in time would change in respect of its position in the A series would not involve that anything really did change.

Without the A series then, there would be no change, and consequently the B series by itself is not sufficient for time, since time involves change.

The B series, however, cannot exist except as temporal, since earlier and later, which are the distinctions of which it consists, are clearly time-determinations. So it follows that there can be no B series where there is no A series, since where there is no A series there is no time.

But it does not follow that, if we subtract the determinations of the A series from time, we shall have no series left at all. There is a series—a series of the permanent relations to one another of those realities which in time are events—and it is the combination of this series with the A determinations which gives time. But this other series—let us

[1] I am not asserting, as Lotze did, that a relation between X and Y *consists* of a quality in X and a quality in Y—a view which I regard as quite indefensible. I assert that a relation Z between X and Y *involves* the existence in X of the quality "having the relation Z to Y" so that a difference of relations always involves a difference in quality, and a change of relations always involves a change of quality.

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call it the C series—is not temporal, for it involves no change, but only an order. Events have an order. They are, let us say, in the order M, N, O, P. And they are therefore *not* in the order M, O, N, P, or O, N, M, P, or in any other possible order. But that they have this order no more implies that there is any change than the order of the letters of the alphabet, or of the Peers on the Parliament Roll, implies any change. And thus those realities which appear to us as events might form such a series without being entitled to the name of events, since that name is only given to realities which are in a time series. It is only when change and time come in that the relations of this C series become relations of earlier and later, and so it becomes a B series.

More is wanted, however, for the genesis of a B series and of time than simply the C series and the fact of change. For the change must be in a particular direction. And the C series, while it determines the order, does not determine the direction. If the C series runs M, N, O, P, then the B series from earlier to later cannot run M, O, N, P, or M, P, O, N, or in any way but two. But it can run either M, N, O, P (so that M is earliest and P latest) or else P, O, N, M (so that P is earliest and M latest). And there is nothing either in the C series or in the fact of change to determine which it will be.

A series which is not temporal has no direction of its own, though it has an order. If we keep to the series of the natural numbers, we cannot put 17 between 21 and 26. But we keep to the series, whether we go from 17, through 21, to 26, or whether we go from 26, through 21, to 17. The first direction seems the more natural to us, because this series has only one end, and it is generally more convenient to have that end as a beginning than as a termination. But we equally keep to the series in counting backward.

Again, in the series of categories in Hegel's dialectic, the series prevents us from putting the Absolute Idea between Being and Causality. But it permits us either to go from Being, through Causality, to the Absolute Idea, or from the Absolute Idea, through Causality, to Being. The first is, according to Hegel, the direction of proof, and is thus generally the most convenient order of enumeration. But if we found it convenient to enumerate in the reverse direction, we should still be observing the series.

A non-temporal series, then, has no direction in itself, though a person considering it may *take* the terms in one

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direction or in the other, according to his own convenience And in the same way a person who contemplates a time-order may contemplate it in either direction. I may trace the order of events from the Great Charter to the Reform Bill, or from the Reform Bill to the Great Charter. But in dealing with the time series we have not to do merely with a change in an external contemplation of it, but with a change which belongs to the series itself. And this change has a direction of its own. The Great Charter came before the Reform Bill, and the Reform Bill did not come before the Great Charter.

Therefore, besides the C series and the fact of change there must be given—in order to get time—the fact that the change is in one direction and not in the other. We can now see that the A series, together with the C series, is sufficient to give us time. For in order to get change, and change in a given direction, it is sufficient that one position in the C series should be Present, to the exclusion of all others, and that this characteristic of presentness should pass along the series in such a way that all positions on the one side of the Present have been present, and all positions on the other side of it will be present. That which has been present is Past, that which will be present is Future.[1] Thus to our previous conclusion that there can be no time unless the A series is true of reality, we can add the further conclusion that no other elements are required to constitute a time-series except an A series and a C series.

We may sum up the relations of the three series to time as follows: The A and B series are equally essential to time, which must be distinguished as past, present and future, and must likewise be distinguished as earlier and later. But the two series are not equally fundamental. The distinctions of the A series are ultimate. We cannot explain what is meant by past, present and future. We can, to some extent, describe them, but they cannot be defined. We can only show their meaning by examples. "Your breakfast this morning," we can say to an inquirer, "is past; this conversation is present; your dinner this evening is future." We can do no more.

The B series, on the other hand, is not ultimate. For, given a C series of permanent relations of terms, which is

[1] This account of the nature of the A series is not valid, for it involves a vicious circle, since it uses "has been" and "will be" to explain Past and Future. But, as I shall endeavour to show later on, this vicious circle is inevitable when we deal with the A series, and forms the ground on which we must reject it.

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not in itself temporal, and therefore is not a B series, and given the further fact that the terms of this C series also form an A series, and it results that the terms of the C series become a B series, those which are placed first, in the direction from past to future, being earlier than those whose places are further in the direction of the future.

The C series, however, is as ultimate as the A series. We cannot get it out of anything else. That the units of time do form a series, the relations of which are permanent, is as ultimate as the fact that each of them is present, past, or future. And this ultimate fact is essential to time. For it is admitted that it is essential to time that each moment of it shall either be earlier or later than any other moment; and these relations are permanent. And this—the B series—cannot be got out of the A series alone. It is only when the A series, which gives change and direction, is combined with the C series, which gives permanence, that the B series can arise.

Only part of the conclusion which I have now reached is required for the general purpose of this paper. I am endeavouring to base the unreality of time, not on the fact that the A series is more fundamental than the B series, but on the fact that it is as essential as the B series—that the distinctions of past, present and future are essential to time, and that, if the distinctions are never true of reality, then no reality is in time.

This view, whether it is true or false, has nothing surprising in it. It was pointed out above that time, as we perceive it, always presents these distinctions. And it has generally been held that this is a real characteristic of time, and not an illusion due to the way in which we perceive it. Most philosophers, whether they did or did not believe time to be true of reality, have regarded the distinctions of the A series as essential to time.

When the opposite view has been maintained, it has generally been, I believe, because it was held (rightly, as I shall try to show later on) that the distinctions of present, past and future cannot be true of reality, and that consequently, if the reality of time is to be saved, the distinction in question must be shown to be unessential to time. The presumption, it was held, was for the reality of time, and this would give us a reason for rejecting the A series as unessential to time. But of course this could only give a presumption. If the analysis of the notion of time showed that, by removing the A series, time was destroyed, this line of argument would be no longer open, and the unreality of the A series would involve the unreality of time.

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I have endeavoured to show that the removal of the A series *does* destroy time. But there are two objections to this theory, which we must now consider.

The first deals with those time-series which are not really existent, but which are falsely believed to be existent, or which are imagined as existent. Take, for example, the adventures of Don Quixote. This series, it is said, is not an A series. I cannot at this moment judge it to be either past, present or future. Indeed I know that it is none of the three. Yet, it is said, it is certainly a B series. The adventure of the galley-slaves, for example, is later than the adventure of the windmills. And a B series involves time. The conclusion drawn is that an A series is not essential to time.

The answer to this objection I hold to be as follows. Time only belongs to the existent. If any reality is in time, that involves that the reality in question exists. This, I imagine, would be universally admitted. It may be questioned whether all of what exists is in time, or even whether anything really existent is in time, but it would not be denied that, if anything is in time, it must exist.

Now what is existent in the adventures of Don Quixote? Nothing. For the story is imaginary. The acts of Cervantes' mind when he invented the story, the acts of my mind when I think of the story—these exist. But then these form part of an A series. Cervantes' invention of the story is in the past. My thought of the story is in the past, the present, and—I trust—the future.

But the adventures of Don Quixote may be believed by a child to be historical. And in reading them I may by an effort of the imagination contemplate them as if they really happened. In this case, the adventures are believed to be existent or imagined as existent. But then they are believed to be in the A series, or imagined as in the A series. The child who believes them historical will believe that they happened in the past. If I imagine them as existent, I shall imagine them as happening in the past. In the same way, if any one believed the events recorded in Morris's *News from Nowhere* to exist, or imagined them as existent, he would believe them to exist in the future or imagine them as existent in the future. Whether we place the object of our belief or our imagination in the present, the past, or the future, will depend upon the characteristics of that object. But somewhere in our A series it will be placed.

Thus the answer to the objection is that, just as a thing is in time, it is in the A series. If it is really in time, it is really in the A series. If it is believed to be in time, it is believed

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to be in the A series. If it is imagined as in time, it is imagined as in the A series.

The second objection is based on the possibility, discussed by Mr. Bradley, that there might be several independent time-series in reality. For Mr. Bradley, indeed, time is only appearance. There is no real time at all, and therefore there are not several real series of time. But the hypothesis here is that there should be within reality several real and independent time-series.

The objection, I imagine, is that the time-series would be all real, while the distinction of past, present, and future would only have meaning within each series, and could not, therefore, be taken as ultimately real. There would be, for example, many presents. Now, of course, many points of time can be present (each point in each time-series is a present once), but they must be present successively. And the presents of the different time-series would not be successive, since they are not in the same time. (Neither would they be simultaneous, since that equally involves being in the same time. They would have no time-relation whatever.) And different presents, unless they are successive, cannot be real. So the different time-series, which are real, must be able to exist independently of the distinction between past, present, and future.

I cannot, however, regard this objection as valid. No doubt, in such a case, no present would be *the* present—it would only be the present of a certain aspect of the universe. But then no time would be *the* time—it would only be the time of a certain aspect of the universe. It would, no doubt, be a real time-series, but I do not see that the present would be less real than the time.

I am not, of course, asserting that there is no contradiction in the existence of several distinct A series. My main thesis is that the existence of *any* A series involves a contradiction. What I assert here is merely that, supposing that there could be any A series, I see no extra difficulty involved in there being several such series independent of one another, and that therefore there is no incompatibility between the essentiality of an A series for time and the existence of several distinct times.

Moreover, we must remember that the theory of a plurality of time-series is a mere hypothesis. No reason has ever been given why we should believe in their existence. It has only been said that there is no reason why we should disbelieve in their existence, and that therefore they may exist. But if their existence should be incompatible with something else,

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for which there is positive evidence, then there would be a reason why we should disbelieve in their existence. Now there is, as I have tried to show, positive evidence for believing that an A series is essential to time. Supposing therefore that it were the case (which, for the reasons given above, I deny) that the existence of a plurality of time-series was incompatible with the essentiality for time of the A series, it would be the hypothesis of a plurality of times which should be rejected, and not our conclusion as to the A series.

I now pass to the second part of my task. Having, as it seems to me, succeeded in proving that there can be no time without an A series, it remains to prove that an A series cannot exist, and that therefore time cannot exist. This would involve that time is not real at all, since it is admitted that, the only way in which time can be real is by existing.

The terms of the A series are characteristics of events. We say of events that they are either past, present, or future. If moments of time are taken as separate realities, we say of them also that they are past, present, or future. A characteristic may be either a relation or a quality. Whether we take the terms of the A series as relations of events (which seems the more reasonable view) or whether we take them as qualities of events, it seems to me that they involve a contradiction.

Let us first examine the supposition that they are relations. In that case only one term of each relation can be an event or a moment. The other term must be something outside the time-series.[1] For the relations of the A series are changing relations, and the relation of terms of the time-series to one another do not change. Two events are exactly in the same places in the time-series, relatively to one another, a million years before they take place, while each of them is taking place, and when they are a million years in the past. The same is true of the relation of moments to each other. Again, if the moments of time are to be distinguished as separate realities from the events which happen in them, the relation between an event and a moment is unvarying. Each event is in the same moment in the future, in the present, and in the past.

[1] It has been maintained that the present is whatever is simultaneous with the assertion of its presentness, the future whatever is later than the assertion of its futurity, and the past whatever is earlier than the assertion of its pastness. But this theory involves that time exists independently of the A series, and is incompatible with the results we have already reached.

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The relations which form the A series then must be relations of events and moments to something not itself in the time-series. What this something is might be difficult to say. But, waiving this point, a more positive difficulty presents itself.

Past, present, and future are incompatible determinations. Every event must be one or the other, but no event can be more than one. This is essential to the meaning of the terms. And, if it were not so, the A series would be insufficient to give us, in combination with the C series, the result of time. For time, as we have seen, involves change, and the only change we can get is from future to present, and from present to past.

The characteristics, therefore, are incompatible. But every event has them all. If M is past, it has been present and future. If it is future, it will be present and past. If it is present, it has been future and will be past. Thus all the three incompatible terms are predicable of each event, which is obviously inconsistent with their being incompatible, and inconsistent with their producing change.

It may seem that this can easily be explained. Indeed it has been impossible to state the difficulty without almost giving the explanation, since our language has verb-forms for the past, present, and future, but no form that is common to all three. It is never true, the answer will run, that M *is* present, past and future. It *is* present, *will be* past, and *has been* future. Or it *is* past, and *has been* future and present, or again *is* future and *will be* present and past. The characteristics are only incompatible when they are simultaneous, and there is no contradiction to this in the fact that each term has all of them successively.

But this explanation involves a vicious circle. For it assumes the existence of time in order to account for the way in which moments are past, present and future. Time then must be pre-supposed to account for the A series. But we have already seen that the A series has to be assumed in order to account for time. Accordingly the A series has to be pre-supposed in order to account for the A series. And this is clearly a vicious circle.

What we have done is this—to meet the difficulty that my writing of this article has the characteristics of past, present and future, we say that it is present, has been future, and will be past. But "has been" is only distinguished from "is" by being existence in the past and not in the present, and "will be" is only distinguished from both by being existence in the future. Thus our statement comes to

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this—that the event in question is present in the present, future in the past, past in the future. And it is clear that there is a vicious circle if we endeavour to assign the characteristics of present, future and past by the criterion of the characteristics of present, past and future.

The difficulty may be put in another way, in which the fallacy will exhibit itself rather as a vicious infinite series than as a vicious circle. If we avoid the incompatibility of the three characteristics by asserting that M is present, has been future, and will be past, we are constructing a second A series, within which the first falls, in the same way in which events fall within the first. It may be doubted whether any intelligible meaning can be given to the assertion that time is in time. But, in any case, the second A series will suffer from the same difficulty as the first, which can only be removed by placing it inside a third A series. The same principle will place the third inside a fourth, and so on without end. You can never get rid of the contradiction, for, by the act of removing it from what is to be explained, you produce it over again in the explanation. And so the explanation is invalid.

Thus a contradiction arises if the A series is asserted of reality when the A series is taken as a series of relations. Could it be taken as a series of qualities, and would this give us a better result? Are there three qualities—futurity, presentness, and pastness, and are events continually changing the first for the second, and the second for the third?

It seems to me that there is very little to be said for the view that the changes of the A series are changes of qualities. No doubt my anticipation of an experience M, the experience itself, and the memory of the experience are three states which have different qualities. But it is not the future M, the present M, and the past M, which have these three different qualities. The qualities are possessed by three distinct events—the anticipation of M, the experience M itself, and the memory of M, each of which is in turn future, present, and past. Thus this gives no support to the view that the changes of the A series are changes of qualities.

But we need not go further into this question. If the characteristics of the A series were qualities, the same difficulty would arise as if they were relations. For, as before, they are not compatible, and, as before, every event has all of them. This can only be explained, as before, by saying that each event has them successively. And thus

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the same fallacy would have been committed as in the previous case.[1]

We have come then to the conclusion that the application of the A series to reality involves a contradiction, and that consequently the A series cannot be true of reality. And, since time involves the A series, it follows that time cannot be true of reality. Whenever we judge anything to exist in time, we are in error. And whenever we perceive anything as existing in time—which is the only way in which we ever do perceive things—we are perceiving it more or less as it really is not.

We must consider a possible objection. Our ground for rejecting time, it may be said, is that time cannot be explained without assuming time. But may this not prove—not that time is invalid, but rather that time is ultimate? It is impossible to explain, for example, goodness or truth unless by bringing in the term to be explained as part of the explanation, and we therefore reject the explanation as invalid. But we do not therefore reject the notion as erroneous, but accept it as something ultimate, which, while it does not admit of explanation, does not require it.

But this does not apply here. An idea may be valid of reality though it does not admit of a valid explanation. But it cannot be valid of reality if its application to reality involves a contradiction. Now we began by pointing out that there was such a contradiction in the case of time—that the characteristics of the A series are mutually incompatible and yet all true of every term. Unless this contradiction is removed, the idea of time must be rejected as invalid. It was to remove this contradiction that the explanation was suggested

[1] It is very usual to present Time under the metaphor of a spatial movement. But is it to be a movement from past to future, or from future to past? If the A series is taken as one of qualities, it will naturally be taken as a movement from past to future, since the quality of presentness has belonged to the past states and will belong to the future states. If the A series is taken as one of relations, it is possible to take the movement either way, since either of the two related terms can be taken as the one which moves. If the events are taken as moving by a fixed point of presentness, the movement is from future to past, since the future events are those which have not yet passed the point, and the past are those which have. If presentness is taken as a moving point successively related to each of a series of events, the movement is from past to future. Thus we say that events come out of the future, but we say that we ourselves move towards the future. For each man identifies himself especially with his present state, as against his future or his past, since the present is the only one of which he has direct experience. And thus the self, if it is pictured as moving at all, is pictured as moving with the point of presentness along the stream of events from past to future.

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that the characteristics belong to the terms successively. When this explanation failed as being circular, the contradiction remained unremoved, and the idea of time must be rejected, not because it cannot be explained, but because the contradiction cannot be removed.

What has been said already, if valid, is an adequate ground for rejecting time. But we may add another consideration. Time, as we have seen, stands and falls with the A series. Now, even if we ignore the contradiction which we have just discovered in the application of the A series to reality, was there ever any positive reason why we should suppose that the A series *was* valid of reality?

Why do we believe that events are to be distinguished as past, present and future? I conceive that the belief arises from distinctions in our own experience.

At any moment I have certain perceptions, I have also the memory of certain other perceptions, and the anticipation of others again. The direct perception itself is a mental state qualitatively different from the memory or the anticipation of perceptions. On this is based the belief that the perception itself has a certain characteristic when I have it, which is replaced by other characteristics when I have the memory or the anticipation of it—which characteristics are called presentness, pastness, and futurity. Having got the idea of these characteristics we apply them to other events. Everything simultaneous with the direct perception which I have now is called present, and it is even held that there would be a present if no one had a direct perception at all. In the same way acts simultaneous with remembered perceptions or anticipated perceptions are held to be past or future, and this again is extended to events to which none of the perceptions I now remember or anticipate are simultaneous. But the origin of our belief in the whole distinction lies in the distinction between perceptions and anticipations or memories of perceptions.

A direct perception is present when I have it, and so is what is simultaneous with it. In the first place this definition involves a circle, for the words "when I have it," can only mean "when it is present". But if we left out these words, the definition would be false, for I have many direct presentations which are at different times, and which cannot, therefore, all be present, except successively. This, however, is the fundamental contradiction of the A series, which has been already considered. The point I wish to consider here is different.

The direct perceptions which I now have are those which

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now fall within my "specious present". Of those which are beyond it, I can only have memory or anticipation. Now the "specious present" varies in length according to circumstances, and may be different for two people at the same period. The event M may be simultaneous both with X's perception Q and Y's perception R. At a certain moment Q may have ceased to be part of X's specious present. M, therefore, will at that moment be past. But at the same moment R may still be part of Y's specious present. And, therefore, M will be present, at the same moment at which it is past.

This is impossible. If, indeed, the A series was something purely subjective, there would be no difficulty. We could say that M was past for X and present for Y, just as we could say that it was pleasant for X and painful for Y. But we are considering attempts to take time as real, as something which belongs to the reality itself, and not only to our beliefs about it, and this can only be so if the A series also applies to the reality itself. And if it does this, then at any moment M must be present or past. It cannot be both.

The present through which events really pass, therefore, cannot be determined as simultaneous with the specious present. It must have a duration fixed as an ultimate fact. This duration cannot be the same as the duration of all specious presents, since all specious presents have not the same duration. And thus an event may be past when I am experiencing it as present, or present when I am experiencing it as past. The duration of the objective present may be the thousandth part of a second. Or it may be a century, and the accessions of George IV. and Edward VII. may form part of the same present. What reason can we have to believe in the existence of such a present, which we certainly do not observe to be a present, and which has no relation to what we do observe to be a present?

If we escape from these difficulties by taking the view, which has sometimes been held, that the present in the A series is not a finite duration, but a mere point, separating future from past, we shall find other difficulties as serious. For then the objective time in which events are will be something utterly different from the time in which we perceive them. The time in which we perceive them has a present of varying finite duration, and, therefore, with the future and the past, is divided into three durations. The objective time has only two durations, separated by a present which has nothing but the name in common with the present of experience, since it is not a duration but a point. What is

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there in our experience which gives us the least reason to believe in such a time as this?

And so it would seem that the denial of the reality of time is not so very paradoxical after all. It was called paradoxical because it seemed to contradict our experience so violently—to compel us to treat so much as illusion which appears *primâ facie* to give knowledge of reality. But we now see that our experience of time—centring as it does about the specious present—would be no less illusory if there were a real time in which the realities we experience existed. The specious present of our observations—varying as it does from you to me—cannot correspond to the present of the events observed. And consequently the past and future of our observations could not correspond to the past and future of the events observed. On either hypothesis—whether we take time as real or as unreal—everything is observed in a specious present, but nothing, not even the observations themselves, can ever *be* in a specious present. And in that case I do not see that we treat experience as much more illusory when we say that nothing is ever in a present at all, than when we say that everything passes through some entirely different present.

Our conclusion, then, is that neither time as a whole, nor the A series and B series, really exist. But this leaves it possible that the C series does really exist. The A series was rejected for its inconsistency. And its rejection involved the rejection of the B series. But we have found no such contradiction in the C series, and its invalidity does not follow from the invalidity of the A series.

It is, therefore, possible that the realities which we perceive as events in a time-series do really form a non-temporal series. It is also possible, so far as we have yet gone, that they do *not* form such a series, and that they are in reality no more a series than they are temporal. But I think—though I have no room to go into the question here—that the former view, according to which they really do form a C series, is the more probable.

Should it be true, it will follow that in our perception of these realities as events in time, there will be some truth as well as some error. Through the deceptive form of time, we shall grasp some of their true relations. If we say that the events M and N are simultaneous, we say that they occupy the same position in the time-series. And there will be some truth in this, for the realities, which we perceive as the events M and N, do really occupy the same position in a series, though it is not a temporal series.

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Again, if we assert that the events M, N, O, are all at different times, and are in that order, we assert that they occupy different positions in the time-series, and that the position of N is between the positions of M and O. And it will be true that the realities which we see as these events will be in a series, though not in a temporal series, and that their positions in it will be different, and that the position of the reality which we perceive as the event N will be between the positions of the realities which we perceive as the events M and O.

If this view is adopted, the result will so far resemble those reached by Hegel rather than those of Kant. For Hegel regarded the order of the time-series as a reflexion, though a distorted reflexion, of something in the real nature of the timeless reality, while Kant does not seem to have contemplated the possibility that anything in the nature of the noumenon should correspond to the time order which appears in the phenomenon.

But the question whether such an objective C series does exist, must remain for future discussion. And many other questions press upon us which inevitably arise if the reality of time is denied. If there is such a C series, are positions in it simply ultimate facts, or are they determined by the varying amounts, in the objects which hold those positions, of some quality which is common to all of them? And, if so, what is that quality, and is it a greater amount of it which determines things to appear as later, and a lesser amount which determines them to appear as earlier, or is the reverse true? On the solution of these questions it may be that our hopes and fears for the universe depend for their confirmation or rejection.

And, again, is the series of appearances in time a series which is infinite or finite in length? And how are we to deal with the appearance itself? If we reduce time and change to appearance, must it not be to an appearance which changes and which is in time, and is not time, then, shown to be real after all? This is doubtless a serious question, but I hope to show hereafter that it can be answered in a satisfactory way.

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